

## AMENDMENT

### In the Claims:

This listing of claims will replace all prior versions and listings of claims in the application:

1-29. **(Canceled)**

30. **(Currently amended)** A method for identifying a HCV polymerase inhibitor, said method comprising:

determining the complementarity of a test compound with an active site and/or RNA binding cleft of a polypeptide using a three-dimensional structural coordinate of said polypeptide or its part and a three-dimensional structural coordinate of said test compound,

wherein said polypeptide is derived from an NS5B HCV polymerase, has an NS5B HCV polymerase activity, and consists of an amino acid sequence X-Y, wherein X is a consecutive amino acid sequence which is a portion of NS5B, the N-terminal amino acid of X is a serine residue corresponding to amino acid residue 1 of NS5B, and the C-terminal amino acid residue of X is selected from amino acid residues 531, 536, 544, and 570 of NS5B; and wherein Y is a carboxyl group ~~or an amino acid sequence which is not derived from NS5B~~; and wherein methionine residues in the amino acid sequence of X ~~may be~~ are replaced by selenomethionine residues,

wherein a said test compound that ~~is complementary~~ has complementarity to said active site and/or RNA binding cleft of said polypeptide ~~inhibits is~~ a HCV polymerase inhibitor ~~by binding to that interacts with~~ said active site and/or RNA binding

cleft of said HCV polymerase; and wherein said test compound interacts with a hydrophobic surface at the boundary domain between Thumb and Palm domains of said polypeptide derived from an NS5B HCV polymerase.

31. **(Previously presented)** A method for identifying a HCV polymerase inhibitor, which method comprises the steps of:

- (a) performing the method of claim 30; and
- (b) determining a HCV polymerase-inhibitory activity of said HCV polymerase inhibitor.

32. **(Canceled)**

33. **(Currently amended)** A method for identifying a HCV polymerase inhibitor, which method comprises the steps of:

- (a) obtaining a polypeptide which is derived from an NS5B HCV polymerase, has an NS5B HCV polymerase activity, and consists of the amino acid sequence X'-Y, wherein X' is a consecutive amino acid sequence which is a portion of the NS5B, the N-terminal amino acid of X' is a serine residue corresponding to amino acid residue 1 of NS5B, and the C-terminal amino acid residue of X' is selected from amino acid residues 531, 536, and 544 of NS5B; and wherein Y is a carboxyl group or another amino acid sequence which is not derived from NS5B; and wherein methionine residues in the amino acid sequence of X' may be are replaced by selenomethionine residues;

- (b) determining the HCV polymerase activity of said polypeptide by reacting said polypeptide obtained in step (a) with a template RNA and substrates in the presence of a test compound;
- (c) determining the HCV polymerase activity of said polypeptide by reacting polypeptide obtained in step (a) with a template RNA and substrates in the absence of said test compound; and,
- (d) comparing the HCV polymerase activity determined in step (b) with the HCV polymerase activity determined in step (c).

34-37. (Canceled)

38. (**Previously presented**) The method according to claim 31, wherein the C-terminal amino acid residue of X is selected from the group consisting of amino acid residues 536, 544 and 570 of NS5B.

39. (**Previously presented**) The method according to claim 33, wherein the C-terminal amino acid residue of X' is selected from the group consisting of amino acid residues 536 and 544 of NS5B.